

**INITIAL STUDY AND NEGATIVE DECLARATION FOR
CONDITIONAL WAIVER OF
WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGE FROM IRRIGATED LANDS
IN THE LOS ANGELES REGION**

**CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD**

LOS ANGELES REGION

August 30, 2005

TABLE OF CONTENTS

Environmental Checklist Form	3
Environmental Factors List.....	4
1 Initial Study	5
1.1 Project Purpose	5
1.2 Location	5
1.3 Background.....	5
1.3.1 Regulatory Requirement.....	5
1.3.2 Existing State and Federal Authority	6
1.3.3 Agriculture in the Los Angeles Region.....	7
1.3.4 Agriculture Impacts to Water Quality in the Los Angeles Region	8
1.3.5 Pollutants of Concern.....	8
1.3.6 Priority Issues in the Los Angeles Region	11
1.3.7 Recent Accomplishments in the Los Angeles Region	12
1.3.8 Program Implementation Costs.....	13
1.4 Project Description	14
1.4.1 Waiver Conditions	15
1.4.2 Water Quality Monitoring	15
1.4.3 The Project's Physical Changes to the Environment	16
1.4.4 Alternatives to the Project.....	16
1.5 Environmental Setting	17
2 Environmental Significance Checklist.....	19
2.1 Aesthetics.....	19
2.2 Agriculture Resources.....	19
2.3 Air Quality	19
2.4 Biological Resource	20
2.5 Cultural Resources	21
2.6 Geology and Soils.....	21
2.7 Hazards and Hazardous Materials	22
2.8 Hydrology and Water Quality.....	23
2.9 Land Use and Planning	24
2.10 Mineral Resources	24
2.11 Noise.....	24
2.12 Population and Housing	25
2.13 Public Services.....	25
2.14 Recreation	25
2.15 Transportation/Traffic.....	26
2.16 Utilities and Service Systems	26
2.17 Mandatory Findings of Significance.....	27
3 Impact Evaluation.....	28

Environmental Checklist Form

1. **Project title:** Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region
2. **Lead agency name and address:** California Regional Water Quality Control Board,
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
3. **Contact person and phone number:** Elizabeth Erickson
California Regional Water Quality Control Board,
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
(213) 576-6683
4. **Project location:** Los Angeles Region
5. **Project sponsor's name and address:** Not Applicable
6. **General plan designation:** Not applicable
7. **Zoning:** Not applicable
8. **Description of project:**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) will consider adoption of a Conditional Waiver of waste discharge requirements (WDRs) for discharges from irrigated lands within the Los Angeles Region (Conditional Waiver). California Water Code (CWC) section 13269 authorizes the Regional Board to waive WDRs for a specific discharge or specific type of discharge if: (1) the waiver is not against the public interest; (2) the waiver does not exceed 5 years in duration; (3) the waiver is conditional and may be terminated at any time, and (4) a public hearing has been held. CWC section 13269(e) states that the Regional Board shall require compliance with the conditions of the waiver.

Based upon the information contained in the Environmental Checklist, the Regional Board finds that the waiver of waste discharge requirements (WDRs) for discharges from irrigated lands within the Los Angeles Region represents a more stringent level of regulatory oversight than currently in place and could not result in a significant adverse effect on the environment. Furthermore, there are feasible mitigation measures that would substantially reduce any significant adverse impact provided that the dischargers comply with the terms of this Conditional Waiver.

9. **Surrounding land uses and setting:**

The proposed project applies to irrigated lands operations in coastal drainages of Los Angeles and Ventura Counties.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):** None

Environmental Factors List

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project:

<input type="checkbox"/>	Aesthetics	x	Agriculture Resources	x	Air Quality
x	Biological Resources	<input type="checkbox"/>	Cultural Resources	x	Geology/Soils
<input type="checkbox"/>	Hazards & Hazardous Materials	x	Hydrology/Water Quality	x	Land Use/Planning
<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population/Housing
x	Public Services	<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation/Traffic
<input type="checkbox"/>	Utilities/Service Systems	x	Mandatory Findings of Significance		

DETERMINATION:

On the basis of this initial evaluation:

- x I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Original signed by
JONATHAN S. BISHOP, EXECUTIVE OFFICER

DATED

1 Initial Study

1.1 Project Purpose

The purpose of the project is to adopt Orders approving “Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region” (Conditional Waiver) and Monitoring and Reporting Programs that would regulate the discharges of waste from irrigated lands, including but not limited to, land planted for row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse operations with permeable floors that are not currently operating under Waste Discharge Requirements (WDRs) or other permits. The Conditional Waiver sets forth conditions that require dischargers to conduct a monitoring and reporting program to determine the effects of their discharge on water quality. The Conditional Waiver also requires dischargers to implement and evaluate management practices that can attain applicable water quality objectives in the waters of the state, and to conduct activities in a manner that would prevent nuisance.

1.2 Location

The Conditional Waiver applies to discharges from all of the irrigated lands within the jurisdiction of the Los Angeles Regional Water Quality Control Board, except those discharges that are subject to an existing regulatory program.

1.3 Background

1.3.1 Regulatory Requirement

Although discharges that constitute “agricultural return flows” are exempt from regulation through the National Pollution Discharge Elimination System (NPDES) permit program of the federal Clean Water Act, they are not exempt from the California Water Code (CWC). Any discharge from irrigated agricultural activities to surface water that impacts or threatens to impact water quality is subject to regulation under Porter Cologne Water Quality Act.

CWC Section 13260 requires persons who are discharging or who propose to discharge waste where it could impact the quality of the waters of the State to submit a Report of Waste Discharge. The Regional Board uses the Report of Waste Discharge in preparing Waste Discharge Requirements that regulate the discharges of waste in compliance with the CWC and other applicable laws and regulations. The purpose of this regulatory program is to protect the beneficial uses of the waters of the State.

CWC Section 13269 allows Regional Boards to waive submission of reports of waste discharge (ROWDs) and/or issuance of WDRs if the Regional Board determines after any necessary State Board or Regional Board meeting that the waiver is consistent with any applicable state or regional water quality plan and is in the public interest. The waiver may not exceed 5 years in duration but may be renewed by the State Board or a Regional Board. The waiver shall be conditional and may be terminated at any time by the State Board or Regional Board.

1.3.2 Existing State and Federal Authority

The Clean Water Act is the primary federal law that regulates both point and nonpoint source water pollution affecting surface waters. Point sources are typically regulated through NPDES permits. However, several types of agricultural discharges, including irrigation water return flow and agricultural stormwater runoff, are exempt from regulation as point source discharges under the Clean Water Act (CWA). Agricultural discharges can be managed as nonpoint sources under the CWA. Waste discharge requirements (WDRs) can be prescribed for agricultural discharges under the Porter Cologne Water Quality Control Act (Porter-Cologne).

Porter-Cologne establishes a comprehensive program for the protection of water quality and the beneficial uses of waters of the State. Porter-Cologne applies to both surface and ground waters and to both point and nonpoint sources. The implementation portion of this comprehensive program should provide for the attainment of water quality standards. Porter-Cologne gives the Regional Board the authority to adopt and enforce requirements for any waste discharge, including those from nonpoint sources and from point sources that are exempt from regulation under the CWA.

When managing agricultural pollution as a nonpoint source, two federal statutes exist that establish a framework for addressing nonpoint source pollution in the Region. These are Section 319 of the CWA and Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990. These statutes encourage states to assess water quality problems associated with nonpoint source pollution and to develop programs to control these sources.

CWA Section 319 requires that, in order to be eligible for federal funding (for grants that implement nonpoint source management programs), states develop an assessment report detailing the extent of nonpoint source pollution, and a management program specifying nonpoint source controls.

CZARA Section 6217(a) requires the state to develop and implement management measures for nonpoint source pollution to restore and protect coastal waters and to establish coastal nonpoint source programs. Under CZARA, California must (1) provide for the implementation of management measures that are in conformity with the USEPA *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993) and (2) provide a process

for developing and revising management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards.

The State Board adopted the “Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program” in May of 2004. The purpose of the Nonpoint Source Program Plan is to improve the State's ability to effectively manage nonpoint source pollution and conform to the requirements of the federal Clean Water Act and the federal Coastal Zone Act Reauthorization Amendments of 1990. The plan describes three options for addressing nonpoint source pollution: waste discharge requirements, conditional waivers of waste discharge requirements, and discharge prohibitions. Thus, conditional waivers of waste discharge requirements can be used to implement the Nonpoint Source Pollution Control Program.

Regional Board staff coordinates with the SWRCB the receipt and review of 319(h) and 205(j) grant applications, which are prioritized based on targeted watersheds and high priority nonpoint source categories. These grants provide funding for local efforts to implement the Nonpoint Source Pollution Control Program.

1.3.3 Agriculture in the Los Angeles Region

In the Los Angeles Region, irrigated crops are the dominant agricultural land use; animal agricultural activities are limited. Water quality impacts associated with agriculture can be traced primarily to irrigation practices because; (1) irrigation water typically contains pollutants imported or introduced into the irrigation water; and (2) irrigation practices mobilize and concentrate some pollutants.

The Region's agriculture is concentrated in Ventura County, which has over 267,000 acres in production (Ventura Co. Agriculture Commissioner, 1999). Agriculture is Ventura County's largest industry and accounts for 11% of the total employment in the county. The value of production in 1999 was \$1,059.1 million (Farm Bureau). Approximately 70% of the farms are between 40 and 50 acres in size, and only about 5% of the farms are greater than 500 acres. Major crops in Ventura County include fruit, nuts and vegetables, nursery stock, and cut flowers (Ventura Co. Agriculture Commissioner, 1999).

Agriculture in Ventura depends primarily on groundwater for its irrigation supply. In 1992, 67% of Ventura County's total water supply (425,500 AF/Y) was from groundwater and about 68% of the water supply (289,340 AF/Y) was used for agriculture (Ventura Water Management Plan 11/94). Groundwater quality in Ventura County is gradually being degraded from agricultural runoff, urban waste and leachate. The major watersheds impacted by runoff from irrigated agriculture are the Santa Clara, the Ventura River, and Calleguas Creek.

There is also diversified crop production in Los Angeles County. The main growing region for food crops in the county is the Antelope Valley, which lies in Los Angeles County, but not in the Los Angeles Water Quality Control Board Region. Approximately 12,000 acres of Los Angeles

County nursery crops lie within the Los Angeles Water Quality Control Board Region and may be covered by the Conditional Waiver.

1.3.4 Agriculture Impacts to Water Quality in the Los Angeles Region

Agriculture is one of the main sources of pollution that impairs our nation's waters (EPA841-F-004F, USGS Circular 1131, D. Jeff Ensley). The diffuse and intermittent nature of agricultural impacts tends to make contamination difficult to control. Pollution from agriculture must be controlled to achieve the Regional Board's mission of preserving and enhancing water quality for the benefit of present and future generations. This goal can be accomplished by prioritizing and successfully implementing appropriate management measures through a combination of outreach, education, technical guidance, funding, regulatory encouragement, and enforcement.

Agriculture is one of the most important industries in the Los Angeles Region because of the need to produce large amounts of readily available food, the amount of money it generates for both the local and national economies, the number of workers it employs, and the political support it receives.

The agricultural industry is diverse, as are the mechanisms by which the industry may create nonpoint source water pollution. Contaminant contributions may include impacts from irrigated land, including nurseries, orchards, pastureland, rangeland, row crops, specialty produce, and turf cropland. Practices associated with these activities may concentrate and/or mobilize pollutants, including pesticides, excess nutrients, fertilizer, trash, and sediment via irrigation and drainage return flow, storm water runoff, percolation to groundwater, subsurface drainage, or wind mobilization.

It is important to recall that these water quality impacts from agricultural discharges represent the baseline for this initial study. The discharges covered by the proposed conditional waiver already occur. The proper baseline is the set of environmental conditions existing at the time the environmental analysis was commenced (14 C.C.R. § 15125(a)). The baseline environmental conditions for this project necessarily include the existing levels and types of irrigated runoff and the existing polluted condition of the receiving waterbodies. The project analysis is, therefore, tailored to changes in the physical environment as a result of the conditional waiver.

1.3.5 Pollutants of Concern

Agriculture is a major source of pollutants that contribute to the impairment of the State's waters as described in the 303(d) list (SWRCB 1996). The primary pollutants are sediments, salts, nutrients, pesticides, bacteria, metals and other trace elements, and temperature. The pollutants related to agriculture that impair the regional watersheds, as listed in the 303(d) list, are shown in Attachment 8. A brief review of impacts caused by these pollutants as well as a list of potential controls are provided below.

1.3.5.1 Sedimentation

Agriculture may cause erosion directly through application of irrigation water, or indirectly through land management practices that exacerbate erosion due to storm flows. Sediment contained in run-off from agricultural lands may carry certain pesticides to surface waters where they contaminate the food chain and affect beneficial uses of water. Excess sedimentation degrades the natural environment, diminishing the health, numbers, and diversity of wildlife and habitat, destabilizing the physical landscape, and increasing the costs of water resource management. Simple methods can be used to minimize sedimentation, such as reducing the amount of irrigation water, using buffer strips and sedimentation basins to control excess sediments from reaching the water bodies, using minimum cultivation practices, constructing properly engineered dirt roads and culverts, installing soil and water recapture systems, and employing erosion control practices. Seventeen percent of our Region's water segments are listed in the 303(d) list as impaired from sedimentation. Sediment impairments are primarily attributed to nonpoint source activities including agriculture, and point sources such as construction site runoff.

1.3.5.2 Salinity

Salinity is a major problem for the environment and agriculture because it negatively impacts diversity, growth rates and other physiological functions of plant and animal populations. As salinity increases, surface and ground water municipal and agricultural beneficial uses may become impaired. Irrigation practices can mobilize naturally occurring salts from the soil, concentrate salts from supply water, and deposit the salts into shallow soil. Salts move with the percolation of water below the crop root zone and can be captured by drainage systems, enter into the groundwater, or become immobilized within the soil structure. Salinity impacts can be minimized by improved irrigation management practices. Chlorides impair about 7 % of the Region's water segments. TMDLs have been established in Calleguas Creek and the Santa Clara River to address chloride levels. Loading of chloride to surface waters is primarily from point sources.

1.3.5.3 Nutrients

Agriculturally derived nutrients include fertilizers, soil and plant amendments, food processing by-product effluent, and animal waste. The effects of nutrients can be two-fold. First, if concentration is high, toxicity can occur resulting in injury, necrosis or death to plants and animals. Second, cumulative effects cause eutrophication (impairing habitats and recreational uses and eventually leading to a reduction of dissolved oxygen) which creates anaerobic aquatic conditions thereby limiting or killing oxygen dependent organisms. Nutrients are transported to surface waters by irrigation, wastewater discharge, wind, and rainfall runoff. Several areas,

including Ventura County, have potentially serious nutrient problems. Nutrient impacts can be reduced by applying less crop amendment, using better methods to recover lost nutrients and waste, planting cover crops, treating runoff with chemical or biological treatment, or implementing other management practices. Almost half of the Region's water segments are impaired by nutrients. Nutrients originate from both point and nonpoint sources, with agriculture being one of the largest of the nonpoint source contributors.

1.3.5.4 Pesticides

Pesticides may impact beneficial uses through direct toxic effects on the organisms themselves or through indirect effects on their food chain. Pesticides include a wide variety of chemicals with both short and long-term effects and various chemical properties. Their entry into surface or ground waters may be caused from irrigation return flows, tile drainage or atmospheric deposition. Water-soluble pesticides may be carried directly into surface waters or adsorbed to sediment prior to transportation. Pesticide impacts can be minimize by reducing the quantity and toxicity of the pesticides used, using a more direct application method that reduces the amount used or the amount available to the environment, or switching to crops that require less toxic pesticides. New Biologically Integrated Orchard System (BIOS) techniques are being considered to reduce pesticides used. Approximately 45% of the Region's water bodies are impaired from a variety of pesticides. A substantial portion of these impairments is from nonpoint source activities including agriculture.

1.3.5.5 Bacteria

Bacteria may impact the beneficial uses of the State's waters by reducing the fishable and swimmable qualities of the water body. High bacteria concentrations can cause human illness or contaminate food sources so that they are unfit for consumption. Water that comes into contact with human or animal waste can mobilize bacteria in that waste. This type of contact can occur where waste is used as part of a standard agricultural operation or where animals have used the field, wetland or pasture prior to irrigation or a storm event causing discharges to receiving waters. Limiting the amount of water contact with animal waste and minimizing animals' access to water bodies can reduce bacteria impacts from agriculture. Bacteria impair 56% of the reaches in the Region. Bacteria impairments are primarily from nonpoint source activities, including agriculture.

1.3.5.6 Trace Elements

Excessive concentrations of trace elements and heavy metals can cause human health and environmental impacts in surface water and groundwater. Some of these trace elements and metals are naturally occurring in soil, such as selenium, and can be mobilized by irrigation and then concentrated in ground water due to percolation of drainage waters. The importation of

trace elements into an irrigated region may also occur from waters imported from outside the watershed, such as selenium-laden water imported from the Colorado River. Dilution of irrigation return flows to control salinity often has the additional effect of reducing trace element concentrations. Approximately 30% of the Region's segments are listed as impaired from trace elements or heavy metals.

1.3.5.7 Elevated Temperature

Temperature changes can cause substantial reductions in the diversity and abundance of native organisms and can increase stress to aquatic life as well as increase the toxicity caused by other pollutants. Elevated temperatures occur when irrigated fields or wetlands are warmed by the sun and then discharge warm water, causing a rise in the stream temperature. This problem is often aggravated when diversions for irrigation and wetland management lower the overall stream flow or where agricultural crops replace riparian vegetation along the waterway. These elevated temperatures directly impact stream aquatic life, especially in certain cold-water streams or those with anadromous fisheries, either by reducing dissolved oxygen or by causing unsuitable temperature conditions. Temperature stress lessens the resistance of aquatic life to disease, pollution, and other stressors and reduces oxygen levels. These impacts can be reduced by minimizing the volume of irrigation waters, recycling irrigation waters and by slowly discharging into the water body, allowing adequate dilution. The number of stream segments impacted by temperature changes has not been adequately quantified; however, it is assumed that the majority of those impacted receiving waters are affected by nonpoint sources.

1.3.5.8 Habitat Modifications

Habitat modifications caused by agriculture may severely impact the beneficial uses of the water body and cause changes in the abundance and diversity of the aquatic and riparian communities. Habitat modifications result in increases in many of the other impacts discussed above, such as those caused by excessive sedimentation and temperature. These impacts can be reduced if adequate education and incentives are provided to the agricultural community. Habitat modifications can also be reduced through regulations like the 401 Water Quality Certification Program. BMPs, such as buffer strips and sedimentation basins, mitigate degradation of aquatic and riparian habitat. Thirteen percent of the Region's water segments are impaired from habitat modifications. An unknown number of these impairments are caused by agriculture.

1.3.6 Priority Issues in the Los Angeles Region

All of the major Ventura County watersheds (Santa Clara, Ventura, and Calleguas) are listed as impaired for agriculture-related pollutants, including, but not limited to nitrogen, salts, and historic pesticides. Nonpoint source control activities will focus on nutrient, pesticide and sediment management.

The majority of agricultural impairments in the Region occur in the Calleguas Creek Watershed. Calleguas Creek drains an area of 343 square miles in southern Ventura County and a small portion of Los Angeles County. The most extensive agricultural activities are orchards and row crops, which cover approximately 25% of the watershed along the valleys and on the Oxnard Plain. Agricultural activities appear to be the source of many pollutants in Calleguas Creek and Mugu Lagoon, which is at the watershed's mouth. These pollutants have caused the Calleguas Creek water resources to be candidate toxic hot spots under the Bay Protection and Toxic Cleanup Program (BPTCP) for reproductive impairment (the endangered clapper rail), exceedance of the Office of Environmental Health Hazard Assessment (OEHHA) advisory level for mercury in fish, and exceedance of the National Oceanic and Atmospheric Administration guidance level for DDT in fish, sediment concentrations of DDT, PCB, chlordane, chlorpyrifos, sediment toxicity and degraded benthic faunal community. Also, fish collected from Calleguas Creek exhibit skin lesions and have been found to have other histopathic abnormalities. High levels of minerals and nitrates are common in the water column and the groundwater.

1.3.7 Recent Accomplishments in the Los Angeles Region

Many valuable projects that target the reduction of nonpoint source pollution in the Region's priority areas have been accomplished through 319(h) funding. The Ventura County Resource Conservation District (RCD) has completed a study of drip irrigation and its effects on water quality as well as an investigation of erosion and sediment control strategies. The Regional Board also worked with the RCD of the Santa Monica Mountains on a 319(h) funded horse management project. These successful demonstration projects can serve as examples and technical guidance for future nonpoint source activities in our region.

1.3.7.1 Irrigation Water Management

The Irrigation Water Management project in Mugu Lagoon was completed in July of 1994. The purpose of this drip irrigation study was to demonstrate that an improved irrigation system and improved irrigation water management would reduce the delivery of nutrients and pesticides from cropland to Mugu Lagoon. Two types of buried drip tape were installed on a 25-acre celery field. Results were compared to a furrow-irrigated field. The demonstration was successful in reducing water use, improving crop yield, and improving the water quality of return flows. This project can be used as a valuable educational tool for regional growers and is an important step in addressing water quality improvements in intensively farmed areas. It also demonstrates that irrigation water management is a necessary prerequisite to proper fertilizer and pesticide management, which is one of our current priority issues.

1.3.7.2 Calleguas Creek Watershed Treatment

The Ventura County Resource Conservation District completed Phase I of the Calleguas Creek Watershed Treatment project in April 1999. This project focused on BMPs that could be implemented by small, individual landowners to control nonpoint sources, specifically: mulches, cover crops, and bank stabilization. Several methods of bank stabilization were installed and compared along approximately 1,400 feet of the stream. The results of this study continue to be presented to growers in an effort to alter long-standing practices of clearing ground cover under orchards and streambank stabilization through the use of rip-rap and concrete. A pamphlet describing the benefits of mulches and cover crops was produced. Phase II also received 319(h) funding and is currently underway. This phase focuses on BMPs designed to prevent streambed erosion that require the coordinated efforts of several landowners. This demonstration project will install properly engineered grade stabilization structures along a tributary to Calleguas Creek.

1.3.7.3 Malibu Creek Watershed Protection

The Malibu Creek Watershed Protection Project was completed by the Resource Conservation District of the Santa Monica Mountains, in cooperation with the Regional Board, in 1999. The purpose of this project was to reduce nutrient and sediment loading to the streams of the Malibu Creek Watershed. This was accomplished through an education and demonstration program that taught horse owners about properly managing horses in the watershed, and through a streambank stabilization and re-vegetation project. The "Stable and Horse Management in the Santa Monica Mountains", a manual on BMPs for the reduction of nonpoint source pollution, was produced and distributed. Reports on Malibu Creek streambank restoration efforts and on nutrient reduction components of the project were also produced. This project successfully addressed sediment, bacteria, and nutrient impacts. The BMP manual continues to be reproduced and distributed by the Resource Conservation District and the Regional Board.

1.3.8 Program Implementation Costs

The Regional Board considered available information on costs to both the Regional Board and the regulated community in developing the Conditional Waiver. Anticipated program implementation costs to the agricultural community include potential fees, management practice implementation, monitoring costs, report preparation and cost for education. Costs to the Regional Board include staff time for program development, outreach to the regulated community, submittal review, program oversight and enforcement.

The Regional Board has endeavored to develop a cost-effective approach to water quality protection by focussing on management practice implementation. The primary focus of the Waiver will be on monitoring water quality and the use of water quality data to implement and adjust management practice implementation. It is also noted that implementation costs will directly offset costs for implementing several TMDLs in Ventura County, including TMDLs for nitrogen, historic and modern pesticides, siltation, and toxicity.

1.4 Project Description

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) will consider adoption of a Conditional Waiver of waste discharge requirements (WDRs) for discharges from irrigated lands within the Los Angeles Region. Irrigated lands are lands where water is applied for producing crops and, for the purpose of this program, include, but are not limited to, land planted to row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse operations with soil floors that are not currently operating under WDRs or other permits.

Discharges include surface discharges (also known as irrigation return flows or tailwater), subsurface drainage generated by installing drainage systems to lower the water table below irrigated lands (also known as tile drains), discharges to groundwater, and storm water runoff flowing from irrigated lands. These discharges can contain wastes that could affect the quality of waters of the State. In the Los Angeles Region, the acreage of irrigated lands is decreasing as urban sprawl occurs. As a result, it is likely that the acreage generating discharges subject to the proposed conditional waiver will decrease over time.

The conditions of the Waiver shall include, but need not be limited to, monitoring, reporting and management practices to correct water quality problems identified. Monitoring requirements shall be designed to support the development and implementation of the Conditional Waiver including, but not limited to, verifying the adequacy and effectiveness of the Waiver's conditions for individuals and groups. In establishing monitoring requirements, the Regional Board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities; the size of the project area; and other relevant factors.

The Conditional Waiver sets forth conditions that will require dischargers to conduct a monitoring and reporting program to determine the effects of their discharge on water quality. This Waiver also requires dischargers to implement and evaluate management practices that will result in achieving compliance with water quality objectives in the waters of the state, and to conduct activities in a manner to prevent nuisance.

Monitoring requirements and options are described in Monitoring and Reporting Programs (MRPs) R4-2005-CI-8835, R4-2005-CI-8836. Dischargers may elect to perform individual monitoring or to participate in a monitoring group. Group monitoring offers a less costly alternative to individual monitoring.

As discussed in section 1.3.4, the baseline for analysis of the environmental impacts is the current environment with the existing discharges from irrigated lands. The project analysis is therefore limited to the changes to the physical environment resulting from adoption of the proposed conditional waiver and implementation of reasonably foreseeable means of complying with the waiver.

1.4.1 Waiver Conditions

- (a) Key provisions of the Conditional Waiver include:
- Dischargers shall submit a Notice of Intent to comply with the terms of the Conditional Waiver, and
 - Dischargers shall conduct water quality monitoring in accordance with a monitoring plan approved by the Regional Board, and
 - Dischargers shall detail the results of monitoring in an annual report to be submitted to the Regional Board, and
 - If water quality benchmarks are exceeded, Dischargers shall submit and implement a Water Quality Management Plan to be approved by the Executive Officer, detailing source identification, best management practices, and a date-specific time line for implementation of those practices, and
 - Wastes discharged from irrigated lands shall be limited to agricultural wastes only.
- (b) Discharges covered under this Order shall be ranked as low-risk or high-risk by the Regional Board Executive Officer (Executive Officer) based upon the information submitted by the discharger in accordance with this Conditional Waiver.

1.4.2 Water Quality Monitoring

1.4.2.1 Individual and Group monitoring program

Water quality monitoring is a requirement of the Conditional Waiver. Dischargers will be required to elect a monitoring option during enrollment. They may choose individual monitoring or join a monitoring group. The purpose of the Monitoring and Reporting Program Plan (MRP Plan) is to monitor the discharge of constituents of concern (COC) and/or waste in irrigation return flows and stormwater from irrigated lands that are enrolled under the Conditional Waiver. Each individual discharger or discharger group shall prepare and submit to the Regional Board for review and approval by the Executive Officer an MRP Plan that meets the minimum requirements of the MRP and includes sites to be monitored, frequency of monitoring, COCs to be monitored, and documentation of monitoring protocols. Upon completion of the monitoring, an annual report will be submitted which includes a Water Quality Management Plan (WQMP) if benchmarks are exceeded.

The reports required by the Conditional Waiver are necessary to evaluate impacts of discharges of waste to waters of the state and to determine compliance with the Conditional Waiver. The Regional Board Executive Office may revise a MRP as appropriate. Individuals and Groups shall comply with the MRP as revised by the Executive Officer.

1.4.3 The Project's Physical Changes to the Environment

Specific summaries and analysis of the potential physical changes in the environment are set forth in the environmental checklist contained in section 2. In summary, the analysis considers the physical impacts that would likely occur as a result of both monitoring activities and the implementation of management practices to mitigate the impacts of agricultural wastes on the waters of the State.

The limited monitoring activities proposed under the conditional waiver are not anticipated to require any physical changes to the environment. Sampling and monitoring activities are often transient, do not require heavy equipment, and do not disturb the soil or watercourse. These types of activities do not change the physical environment, although they can reveal important impacts on the physical environment.

As described in more detail as part of the environmental checklist, some management practices may require physical changes to the environment. These management practices would be triggered if the discharges from specific irrigated lands are shown to be causing exceedances of benchmarks, as identified in the conditional waiver. The physical change in the environment may occur if a person subject to the waiver decides to implement a structural control to reduce the discharges of waste to waters of the State.

The specific practices or mix of practices that individuals may select can not be evaluated and it would be speculative to attempt such an analysis at this time. Reasonably foreseeable means of compliance are discussed in the following analysis and in the proposed conditional waiver, but the reasonably foreseeable means of compliance are not anticipated to have an adverse impact on the environment. In fact, the anticipated means of compliance with the conditional waiver will have a positive impact on water quality, and therefore, the physical environment.

1.4.4 Alternatives to the Project

In developing the Conditional Waiver, the Regional Board staff has considered alternatives to the project. If the Regional Board proceeds with adoption of a Conditional Waiver, the Water Code specifies that the waiver must contain conditions and monitoring requirements. As a result, the two alternatives to the Conditional Waiver analyzed for CEQA are the "no action" and "waste discharge requirement" alternatives.

- 1) No action. The first alternative is to take no formal action on regulation of agricultural discharges. Currently, agricultural discharges in the Los Angeles Region are regulated under the 1998 Nonpoint Source (NPS) Management Plan. This Plan was superseded in 2004 by POLICY FOR IMPLEMENTATION AND ENFORCEMENT OF THE NONPOINT SOURCE POLLUTION CONTROL PROGRAM. As described in the Basin Plan, the 1998 NPS Management Plan has three tiers: 1) Voluntary Implementation of Best Management Practices, 2) Regulatory based enforcement of Best Management Practices, and 3) Effluent Limitations. Currently, waste discharges from irrigated lands are subject to Tier 1, Voluntary Implementation of Best Management Practices. The “no action” alternative does not comply with the Water Code because it would not result in regulation of the discharges of waste from irrigated lands. If the Regional Board moved to enforce against those discharging wastes from irrigated lands (because they had no valid waiver or permit), then the Regional Board would effectively halt agriculture in the Los Angeles Region. This would most likely result in significant adverse environmental impacts by halting an important source of food crops and expediting the urbanization of open space that is currently farmed.
- 2) WDRs. This alternative consists of issuing waste discharge requirements to agricultural dischargers. This “WDR” alternative would result in similar environmental impacts and benefits as those of the proposed project, the Conditional Waiver. However, this alternative would be unnecessarily exhaustive of limited Regional Board staff resources. This alternative will also preclude the option for dischargers to form groups to consolidate monitoring efforts and comply cost effectively with the regulations.

1.5 Environmental Setting

The Los Angeles Regional Water Quality Control Board has jurisdiction over all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). The project encompasses all of the irrigated land in the Los Angeles Region including the Santa Clara River, Ventura River, Calleguas Creek, and other coastal streams.

Most of the Los Angeles Region lies within the western portion of the Transverse Ranges Geomorphic Province. Major mountain ranges within the Los Angeles Region include San Gabriel Mountains, Santa Monica Mountains, Simi Hills, and Santa Ynez Mountains. With prevailing winds from the west and northwest, moist air from the Pacific Ocean is carried inland in the Los Angeles Region until it forced upward by the mountains. The resulting storms, common from November through March, are followed by dry periods during the summer months. Differences in topography are responsible for large variations in temperature, humidity, precipitation, and cloud cover throughout the Region. Some physical characteristics of the Region are listed below:

<u>CHARACTERISTICS</u>	<u>MEASURE</u>
Area of region	4,288 square miles
Streams	6,455 miles
Lakes	17,126 acres
Mainland coast	120 mile

<u>CHARACTERISTICS</u>	<u>NUMBER</u>
Ground Water Basins	53
Areas of Special Biological Significance	9

Diversity in topography, soil, and microclimates of the Region supports a corresponding variety of plant and animal communities. However, increasing urbanization and development have resulted in the loss of habitat and a decline in biological diversity. As a result, several native flora and fauna species have been listed as rare, endangered or threatened. Habitats that support rare, endangered, threatened, or other sensitive plant or animal species are unique habitats in terms of their physical, geographical, and biological characteristics. Many unique habitats, including coastal wetlands and lagoons, are found along the southern coast of Ventura County. These areas provide habitats for many fish, birds, invertebrates, sea lions, and for other marine and estuarine species. Mugu Lagoon is the most extensive wetland in the Region and supports a rich diversity of fish and wildlife. Other wetlands in Ventura County include McGrath Lake, Ormond Beach, and the estuaries at the mouths of the Ventura and Santa Clara River. The County of Los Angeles has designated sixty Significant Ecological Areas (SEAs) within the County. Malibu Lagoon supports two important plant communities, the coastal salt marsh and coastal strand, and is an important refuge for migrating birds.

2 Environmental Significance Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
2.1 Aesthetics				
Would the project:				
a) Have a substantial adverse effect on a scenic vista?				x
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				x
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				x
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				x
2.2 Agriculture Resources				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			x	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?			x	
2.3 Air Quality				
Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
2.4 Biological Resource				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				x
2.5 Cultural Resources				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5?				x
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5?				x
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				x
d) Disturb any human remains, including those interred outside of formal cemeteries?				x
2.6 Geology and Soils				
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				x
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				x
ii) Strong seismic ground shaking?				x
iii) Seismic-related ground failure, including liquefaction?				x
iv) Landslides?				x
b) Result in substantial soil erosion or the loss of topsoil?			x	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
d) Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				x
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				x
2.7 Hazards and Hazardous Materials				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				x
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				x
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				x
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				x
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				x
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				x
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
2.8 Hydrology and Water Quality				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?				x
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			x	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			x	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				x
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				x
f) Otherwise substantially degrade water quality?				x
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				x
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				x
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				x
j) Inundation by seiche, tsunami, or mudflow?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
2.9 Land Use and Planning Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	
2.10 Mineral Resources Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
2.11 Noise Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				x
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				x
2.12 Population and Housing				
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				x
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				x
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				x
2.13 Public Services				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				x
Fire protection?				x
Police protection?				x
Schools?				x
Parks?				x
Other public facilities?			x	
2.14 Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
2.15 Transportation/Traffic				
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
2.16 Utilities and Service Systems				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				x
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				x
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				x
g) Comply with federal, state, and local statutes and regulations related to solid waste?				x
2.17 Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				x
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				x
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				x

3 Impact Evaluation

The analysis of potential environmental impacts is based on possible changes in irrigation management methods and other approaches taken to control agricultural discharges in response to the proposed Conditional Waiver for Waste Discharges from Irrigated Lands. The proposed project will result in more widespread implementation of management practices for irrigation management, erosion control, pesticide management, and nutrient management. Potential impacts to air quality, biological, agricultural, geology and soils, and water resources are discussed below, but are generally found to be of no significance.

2.1 Aesthetics

None of the potential practices described above would alter any scenic vistas, damage scenic resources, degrade the visual character of any site, or adversely affect day or nighttime views.

2.2 Agricultural Resources

The purpose of the Conditional Waiver is to increase the use of management practices that will protect water quality. In some cases, the water quality benefits of a practice are well documented. But in some other cases, the effectiveness of a given practice is not known. There are currently many practices available to growers which will have a beneficial impact on water quality by reducing erosion, improving irrigation efficiency to reduce the amount of water entering state waters from agricultural lands, and reducing the total amount of fertilizers and pesticides applied to crops. Many of these practices may actually improve agricultural resources by reducing the loss of topsoil or improving soil quality, and are likely to be implemented on a more widespread basis as a result of implementation of the Conditional Waiver.

Conservation practices that could affect the amount of land used for producing crops include vegetating farm roads, installing vegetated filter strips, planting cover crops, and installing sediment detention basins. The Regional Board has reviewed the potential cost of some commonly used practices that might be employed by growers. Practices may vary widely in both their initial installation costs and in the long-term costs associated with maintenance and reduced cropping area. In some cases, practices can result in improved productivity that will offset costs associated with taking some land out of production for conservation practices. Some practices, such as improved irrigation efficiency and nutrient management, can result in cost savings over time. The available management practices or other potential strategies that could be pursued by growers are unlikely to lead to a conversion of prime agricultural farmland to other uses.

Growers have a wide range of options available to minimize or eliminate water quality impacts. Based on the range of options available, growers should be able to

choose an approach appropriate to their crops and fields that will minimize costs and allow them to continue farming. The availability of federal and state government funds for environmental conservation should allow growers to offset some of their costs, if they choose an approach that requires a greater capital investment.

2.3 Air quality

Depending on the implementation strategy chosen, sediment removal could result in increased air emissions. However, any potential impact on air quality would be subject to regulation by the applicable air pollution control agency. Any significant, unmitigated impacts on air resources would be short-term in duration and are outweighed by the need to implement the Conditional Waiver and remove the related water quality impairments from the region.

2.4 Biological Resources

The proposed Conditional Waiver is designated to improve water quality through the widespread implementation of management practices that will reduce the amount of sediment, pesticides, and nutrients entering the water of the State. The goal of the associated monitoring program is to assess beneficial use protection in the agricultural areas of the region. Increased regulation of agriculture through the Conditional Waiver will reduce impacts to biological resources by reducing exposure to agricultural pollutants.

It is possible that improved irrigation efficiency in some areas will result in reduced flows during the summer. However, many streams and rivers in the Los Angeles region would not flow during the summer months under natural conditions, and reduction in summer flows will not affect migration and spawning of fish that are adapted to such hydrologic regimes. Reduced withdrawals of water for irrigation uses in some locations will allow surface and groundwater flows to return to, or more closely approximate, natural flows and will either cause no impact or improve habitat by allowing it to return to a natural state. It is not expected that the Conditional Waiver will result in significant loss of habitat for threatened or endangered species. Practices such as vegetated waterways, hedgerows, and riparian restoration will likely result in increased habitat for many species.

2.5 Cultural Resources

Implementation of the proposed Conditional Waiver is not likely to affect cultural resources. None of the potential practices that growers might implement are likely to change the significance of any historical or archaeological resource, destroy a unique paleontological resource or geologic feature, or disturb any human remains.

2.6 Geology and Soils

Implementation of the proposed Conditional Waiver will not effect the geology of the region and will not expose people to additional geologic hazards. Depending on the implementation strategy chosen, the proposal may result in the use of infiltration devices or other structural management practices to treat agricultural discharge, which could result in disruptions of the soil by increasing the rate at which water is discharged to the ground. This potential adverse impact could be mitigated to less than significant levels if structural management practices are properly designed and sited in areas where risks to soil disruption are minimal. Growers may also plant cover crops or buffer strips to increase soil infiltration and reduce runoff, which will likely reduce soil erosion.

2.7 Hazard and Hazardous Materials

The Department of Pesticide Regulation examines hazards posed by pesticides to workers and the public during its regulatory process. Each product is evaluated for potential hazards and any conditions necessary for the safe use of the material are required on the label or in specific regulations. Some of these requirements include use of protective clothing and respirators, use of a closed system for mixing and loading, or special training requirements for workers applying the pesticide. Implementation of the Conditional Waiver should not result in any increased exposure to hazards or hazardous material and may reduce exposure as growers implement pest management techniques that reduce applications in order to minimize potential runoff.

2.8 Hydrology and Water Quality

Changes in drainage patterns and the rate and amount of surface water runoff will occur if a portion of agricultural discharge is diverted and/or collected and treated, or if structural BMPs are implemented to achieve compliance with the Conditional Waiver. Changes in surface water runoff resulting from the use of infiltration devices and other structural BMPs would be considered a positive environmental impact. Such devices address the effects of development and increased impervious surface in the watersheds. Depending on the implementation strategy chosen, the proposal may result in the diversion and storage of a portion of storm water, altering its current course of flow in the river. However, if properly sited and designed, treatment strategies will not reduce the flood control functions in the region and therefore these impacts would be less than significant. Moreover, they will likely reduce peak floodwater flows, which would be a positive impact.

Management practices will be implemented with the aim of improving water quality by reducing the amount of nutrients and pesticides applied to and/or discharging from agricultural lands. The requirement for all agricultural operations to have a QAPP is intended to ensure that operations are aware of potential impacts of various practices and to ensure that the reduction of surface water discharges does not result in increased groundwater discharges.

If dischargers elect to implement practices such as sediment retention basins, which could potentially fail and cause downstream problems, the management practice must meet local design standards. Practices designed to slow stormwater runoff and increase infiltration by maintaining vegetation may increase recharge and increase stream flow in some areas. Improved irrigation efficiency will also reduce pumping and may reduce overdraft and seawater intrusion in some areas

2.9 Land Use and Planning

Depending on the implementation strategy chosen, the proposal may result in alteration of the present or planned land use of an area to provide land for storage, diversion or treatment facilities for agricultural runoff water. However, projects may be designed to increase parks and wildlife habitat areas and to improve water quality

2.10 Mineral Resources

The effect of the proposed Conditional Waiver should be limited to land currently under agricultural production, and there should be no impact to mineral resources.

2.11 Noise

The proposed Conditional Waiver should have no impact on noise in the project area.

2.12 Population and Housing

The proposed Conditional Waiver will likely result in changes in BMPs. Those changes in practices would not directly or indirectly induce population growth in the area, displace existing housing, or displace people. The proposed Conditional Waiver should not have an impact on population and housing.

2.13 Public Services

The proposal will result in the need for increased maintenance of storm water diversion facilities or structural BMPs. Non-structural BMPs may require additional road maintenance as well. The majority of the maintenance will be by private entities so the overall impact on public service is not significant.

2.14 Recreation

There should be no increase in use of parks or recreational facilities or the need of new or expanded recreational facilities as a result of this proposed Conditional Waiver.

2.15 Transportation/Traffic

The proposed Conditional waiver will not have an impact on transportation/traffic.

2.16 Utilities and Service Systems

The proposed Conditional Waiver will likely result in changes in BMPs. No wastewater treatment requirements for runoff from agricultural lands have been established by the Regional Board. The proposed Conditional Waiver should not result in changes in wastewater treatment requirements.

The proposed Conditional Waiver does not require and should not result in the construction or expansion of new storm water drainage facilities. The most feasible practices for the control of discharges from farms are on-field practices.

The proposed Conditional Waiver should not result in significant changes in water supply. One of the potential alternative practices that could be used by growers would be the use of cover crops to increase infiltration and reduce surface runoff of water, which may contain contaminants. The use of cover crops may require additional irrigation water but may also result in reduced evaporation from soil surfaces, resulting in no or little net change in irrigation water needs. Improved irrigation efficiency, one of the principle means of reducing agricultural discharges, will likely result in water savings.

The proposed Conditional Waiver should not require any changes in wastewater treatment service. The potential practices that could be applied by growers should not result in any changes in the generation of solid waste and therefore should not impact landfill capacity. The potential practice that could be applied by growers should not result in any changes in the generation of solid waste and therefore should not affect compliance with federal, state, or local statutes and regulations related to solid waste.

2.17 Mandatory Findings of Significance

The implementation of this Conditional Waiver will result in improved water quality in the waters of the Region and will have significant positive impacts to the environment over the long term. Specific projects employed to implement the Conditional Waiver may have adverse significant impacts to the environment, but these impacts are expected to be limited, short-term or may be mitigated through design and scheduling. The initial study for the Conditional Waiver and this checklist provide the necessary information pursuant to Public Resources Code section 21159 to conclude that properly designed and implemented BMPs or treatment systems will not have a significant adverse effect on the environment. Any of the potential impacts could be mitigated at the subsequent project level phase because it would develop the design of a specific BMP or treatment system. Board staff will develop guidelines specifying which BMPs or treatment systems will not have potential impact beyond the stated intent to

improve the water quality of the discharge from irrigated lands. At this stage, any conclusions would be speculative.

Specific projects, which may have a significant impact, would be subject to a separate environmental review. The lead agency for subsequent projects would be obligated to mitigate any impacts they identify, for example by mitigating potential flooding impacts by designing the BMPs with adequate margins of safety.